

PATENT ABSTRACTS OF JAPAN

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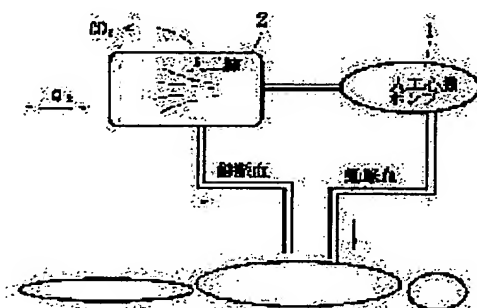
(54) ANTI-THROMBUS MEDICAL TREATMENT MATERIAL AND ARTIFICIAL BLOOD VESSEL, ARTIFICIAL LUNG, DIALYSIS MEMBRANE, DIALYSIS CIRCUIT AND INTRAVASCULAR

(57) Abstract:

PURPOSE: To prevent the occurrence of blood coagulation and plasma protein deposition by applying corona discharge or glow discharge treatment to the surface of a molded product such as a film and a tube mainly composed of polypropylene and in contact with blood, and negatively charging the surface.

CONSTITUTION: Blood supplied to an artificial lung 2 through an artificial heart pump 1 in an artificial heart-lung circuit, is replenished with oxygen or treated otherwise in the lung 2. In this case, each organ is molded out of polypropylene, and the surface thereof in contact with blood is subjected to corona or glow discharge treatment. The surface of a film, a tube and other molded products made of polypropylene and in contact with blood is, then, subjected to oxidizing treatment under the application of corona

discharge, and negatively charged. Alternatively, the surface coming in contact with blood is negatively polarized and charged under the application of corona discharge. Furthermore, the internal surface of the polypropylene tube of the artificial blood vessel is oxidized with corona discharge, negatively charged, and improved in hydrophilic property.



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